NOTEWORTHY COLLECTIONS

California

Chrysothamnus nauseosus (Pallas) Britton ssp. *bernardinus* (H. M. Hall) H. M. Hall & Clements (Asteraceae).—San Diego Co., rocky gabbro outcrops in mixed coniferous forest, N side of Cherry Flat near Conejos Hiking Trail, ca. 0.5 mi below summit of Cuyamaca Peak, Cuyamaca Mts., 32°57′34″N, 116°36′35″W, ca. 1800 m, 28 Jul 1987, *Hirshberg s.n.* (SD); same location, 28 Aug 1989, *Hirshberg 97* (ARIZ, KANU, LSU, RSA, SD, TEX, UC, UCR).

Significance. A range extension of ca. 90 km S from the San Jacinto Mts., Riverside Co., CA. Previously known from the San Gabriel, San Bernardino, and San Jacinto mts.

Epilobium minutum Lindley ex Hooker (Onagraceae).—San Diego Co., gabbro outcrop on N slope of Cuyamaca Peak, W of Conejos Trail ca. 0.25–0.5 mi SW of small meadow, 32°57′30″N, 116°36′20″W, 1750 m, 15 May 1988, *Hirshberg s.n.* (SD); same location, 12 Jun 1988, *Hirshberg s.n.* (SD).

Significance. A range extension of ca. 300 km SE from Ventura Co., CA. Known previously from BC, Canada, S to Ventura and Madera cos., CA, and E to MT and NV.

Polygonum parryi E. Green (Polygonaceae).—San Diego Co., Cuyamaca Mts., rare in open chaparral E of small meadow on N side of CA hwy 79, ca. ¼ mi E of Chambers Park, 32°59′32″N, 116°34′26″W, 1425 m, 16 May 1988, *Hirshberg s.n.* (SD); rare in pebbly areas in open chaparral on N side of CA hwy 79, across from Chambers Park, 32°59′29″N, 116°34′33″W, 1425 m, 21 May 1988, *Levin and Hirshberg 2020* (SD); rare in gravelly soil, grassland at edge of chaparral, ca. 300 m WNW of jct. of CA hwy 79 and road to Camp Hual-Cu-Cuish, 32°58′40″N, 116°35′W, 1450 m, 21 May 1988, *Levin and Hirshberg 2024* (SD); rare in gravelly areas, N-facing gabbro meadow S of Wolahi Rd, 32°59′20″N, 116°35′20″W, 1400 m, 13 Jun 1988, *Hirshberg s.n.* (SD); about 100–200 plants scattered along edge of Lake Trail N of Cuyamaca Store, 32°59′N, 116°35′W, 1420 m, 13 Jun 1988, *Hirshberg s.n.* (SD). (The determinations of both Levin and Hirshberg specimens and the May Hirshberg specimen were confirmed by J. C. Hickman, 1988).

Significance. Reported from the Cuyamaca Mts. by Jepson (Manual of Flowering Plants of California, 1923, p. 290) and several subsequent authors, but prior to these collections no specimens of this species were known from the Peninsular Ranges (J. C. Hickman, personal communication). This inconspicuous annual, otherwise found from the Sierra Nevada N to WA, appears to be uncommon to rare in gravelly soil around the Cuyamaca Lake Basin.

—Geoffrey A. Levin (see below) and Jerilynn Hirshberg, P.O. Box 2, Julian, CA 92036.

Ribes viburnifolium A. Gray (Grossulariaceae).—San Diego Co., small side canyon off Goat Canyon at W end of Spooner's Mesa, steep N-facing slope with *Rhus integrifolia, Heteromeles arbutifolia, Polypodium californicum,* T19S, R2W, NW¼ of NW¼ of NW¼, sect. 9, 32°32′21″N, 117°05′54″W, 75 m, 14 Mar 1989, *V. Scheidt s.n.* (SD); same location, 9 April 1990, *Levin and M. Howe 2053* (RSA, SD, UC).

Significance. First native record for mainland USA (cf. Moran, Madroño 26:49, 1979), a range extension of ca. 6 km N from La Joya, Baja California, México. Previously known from northern coastal Baja California and Isla de Cedros, México, and Santa Catalina Island, CA.

—Geoffrey A. Levin, Botany Department, San Diego Natural History Museum, P.O. Box 1390, San Diego, CA 92112.

Idaho

Butomus umbellatus L. (Butomaceae).—Bingham Co., flowering emergent and sterile submersed forms along water's edge on both sides of the main Aberdeen–Springfield Canal, 6 km W of Springfield, N of American Falls Reservoir, T4S, R32E, SE¼ sect. 7, 1357 m, 14 Jul 1990, *T. C. Fuller, K. W. Fuller, and G. D. Barbe 4387, 4388* (CDA).

Previous knowledge. Flowering rush was first collected along the banks of the Snake River at Idaho Falls, Bonneville Co., 9 Aug 1956, *Anderson 643* (CAS). It was reported to have been there for at least 10 years prior, making its introduction sometime before 1946. Flowering rush also was collected from a small pond on the west fork of Felton Creek 5 miles northeast of Moscow, Latah Co., *Francq s.n.* (ID) (Leaflets in Western Botany 10:109, 1964), but Anderson (Bulletin of the Torrey Botanical Club 101:292–296, 1974) was unable to locate the voucher for that collection and unable to relocate the population from which it came. This Eurasian species is presently widespread in the St. Lawrence River Basin, south central Canada, and the northern prairie states. It is a frequent weed of rice cultivation in southern Europe.

Significance. This aggressive aquatic weed presents a serious threat to irrigated agriculture in ID and other western states, and to rice cultivation in CA, by impeding water flow, causing heavy sedimentation, and reducing the carrying capacity of water delivery systems. The species has severely infested a 19 km segment of the main Aberdeen–Springfield Canal. This westernmost collection is approximately 80 km downstream and SW of the original occurrence at Idaho Falls. Efforts to control the weed in ID have not been successful; mechanical removal has only caused it to propagate and spread.

—Ken Fuller, Bureau or Land Management, 200 South Oakley Highway, Burley, ID 83318; Thomas C. Fuller, and G. D. Barbe, California Department of Food and Agriculture, 1220 N Street, Sacramento, CA 95814.

Oregon

Cytisus striatus (Hill.) Rothm. (Leguminosae).—Lane Co., on sand dunes along South Jetty Road, ca. 2 km SW of Florence, frequent, with *C. scoparius,* T18S R12W S33, SW¼, 24 Aug 1982, *Wagner 2901* (ORE, OSC, UC).

Significance. First record for OR and the western states. Introduced from Europe.

Tillaea muscosa L. (Crassulaceae).—Josephine Co. along Interstate 5 freeway at Manzanita Rest Area (W side of freeway, off S-bound lanes), ca. 8 km NNW of Grants Pass, drying flats wet in winter, with grasses and other annual weeds, T35S R06W S24, 28 April 1984, *Wagner 3252* (ORE, OSC).

Significance. First record for OR; previously known from CA (Munz, A California Flora with Supplement, 1968).

Equisetum telmateia Ehrh. (Equisetaceae).—Umatilla Co. along South Fork Umatilla River ca. 100 m above confluence with Thomas Creek, T02N R37E S5, 820 m, 30 Jun 1990, *Wagner 4369* (ORE, OSC, WTU, UC, NY).

Significance. Previously unknown E of the Cascade Mts. in OR; growing with *Alnus rubra, A. incana* and *Alnus rubra* × *incana* hybrids, indicating a refugium of coastal disjuncts parallel to those found in central ID (Northwest Science 52:205–211, 1978).

Eburophyton austiniae (A. Gray) Heller (Orchidaceae).—Umatilla Co., along North Fork Umatilla River ca. 1 km up from confluence with South Fork, T03N R37E S22, 732 m, 30 Jun 1990, observed and positively identified by D. Wagner, but not collected because only a single individual seen.

Significance. Previously unknown east of the Cascade Mtns. in OR, a coastal disjunct as the *Equisetum,* above, and like it also found in west central ID (Hitchcock and Cronquist, A Flora of the Pacific Northwest, 1973).

Lycopodium complanatum L. (Lycopodiaceae).—Union Co., 32 km SW of LaGrande, along a small tributary of the Grande Ronde near the junction of Forest Service Roads 4305-960 and 4305-980, T05S R36E S18 SE¼ SW¼, 1370 m, 13 Jul 1990, *Paula J. Brooks s.n.* (ORE).

Significance. First record for eastern OR, all the other OR sites being on Mt. Hood (personal communication, Oregon Natural Heritage Data Base). Unlike the above two coastal disjuncts, this is a southward range extension of a circumboreal species.

Tiarella trifoliata L. var. *laciniata* (Hook.) Wheelock (Saxifragaceae).—Lane Co., Battle Crk. ca. 5 km SSE of Crow, in wetland created by beaver dams along crk., under *Acer macrophyllum* and *Alnus rubra,* T19S R05W S5 SW¼ NW¼, 183 m, 15 May 1990, *Steve Acker s.n.* (ORE); Lane Co., 1.6 km W of Noti, in a steep draw under *Acer macrophyllum* and *Alnus rubra,* T17S R06W S42 NW¼ NW¼, 244 m, 13 May 1990, *Danna Lytjen s.n.* (ORE).

Significance. A considerable range extension from "Vancouver Island and adjacent Puget Sound islands, Washington" (Hitchcock and Cronquist, A Flora of the Pacific Northwest, 1973). Peck (A Manual of the Higher Plants of Oregon, 1961) reports it from "Northwestern Oregon" but there are no supporting specimens in the Peck herbarium (WILLU).

—David H. Wagner, Herbarium, Department of Biology, University of Oregon, Eugene, OR 97403.

ANNOUNCEMENT

Southwest Botanical Systematics Symposium

The Seventh Annual Southwestern Botanical Systematics Symposium will be held May 24–25. This year's topic is "Modes of Speciation." Invited speakers include Jerrold Davis, Cornell University; Leslie Gottlieb, University of California, Davis; R. C. Jackson, Texas Tech University; Donald Levin, University of Texas; Loren Rieseberg, Rancho Santa Ana Botanic Garden; and Robert Wyatt, University of Georgia. The evening address "Reflections on Speciation" will be given by Harlen Lewis, University of California, Los Angeles. The cost is $45.00 ($35.00 for students), which includes Friday evening social, box lunch, and Saturday banquet. To register, send your name, address, and telephone or Fax number, with a check payable to: Rancho Santa Ana Botanic Garden, Systematics Symposium, 1500 N. College Avenue, Claremont, CA 91711. For more information, call (714) 625-8767, ext. 51.